G. S. PANNEBAKER.

TROLLEY WIRE CONNECTION.

APPLICATION FILED SEPT. 23, 1908.

913,155. Patented Feb. 23, 1909.

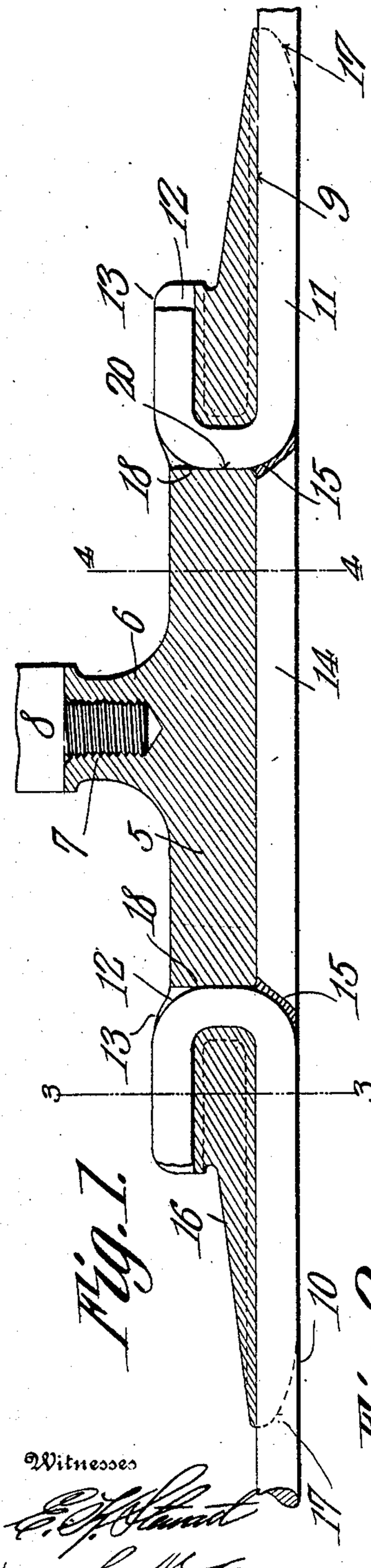

Fig. 1.

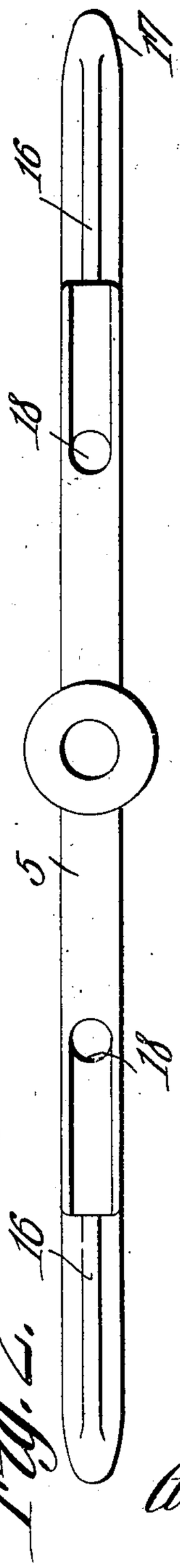

Fig. 2.

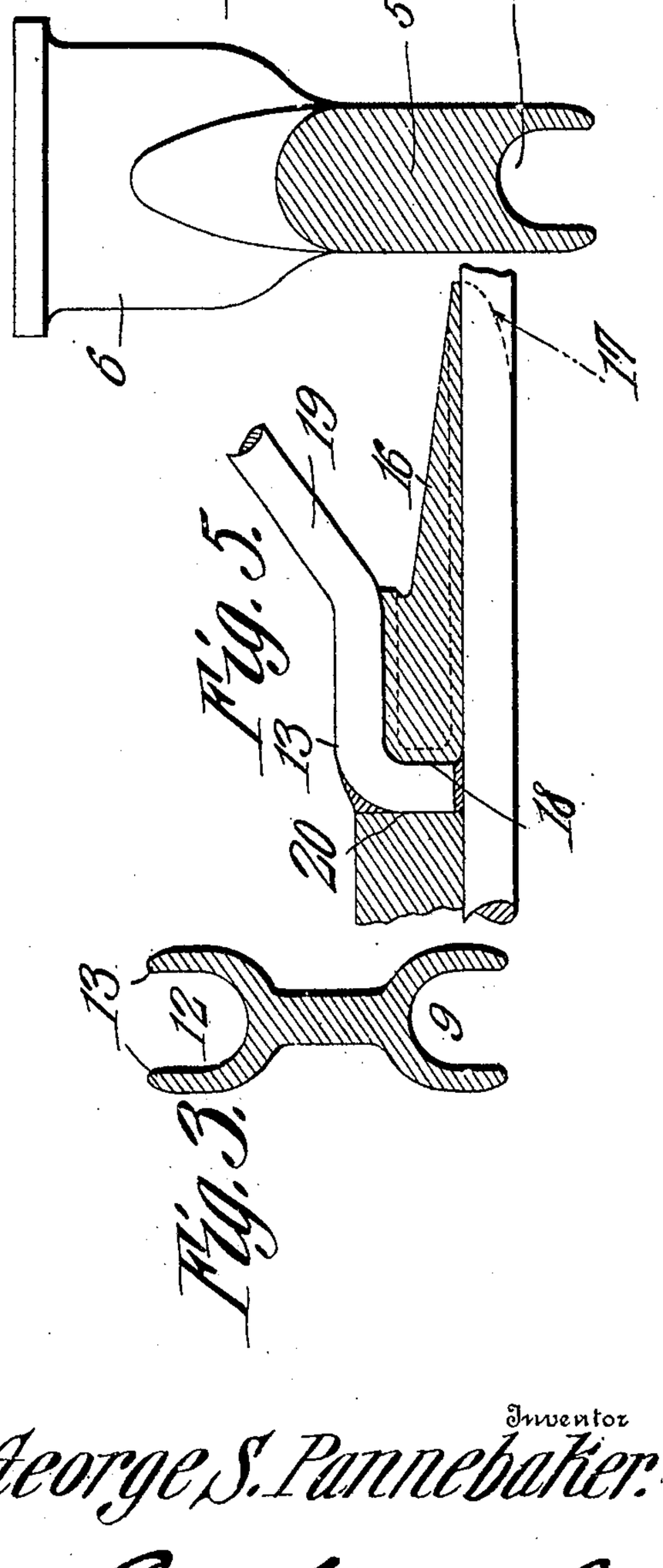

Fig. 4.

Fig. 5.

Fig. 3.

Witnesses

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UNITED STATES PATENT OFFICE.

GEORGE S. PANNEBAKER, OF LEWISTOWN, PENNSYLVANIA.

TROLLEY-WIRE CONNECTION.

No. 913,155. Specification of Letters Patent. Patented Feb. 23, 1909.

Application filed September 23, 1908. Serial No. 454,282.

To all whom it may concern:

Be it known that I, GEORGE S. PANNEBAKER, a citizen of the United States, residing at Lewistown, in the county of Mifflin and State of Pennsylvania, have invented a new and useful Trolley-Wire Connection, of which the following is a specification.

This invention relates to a combined wire splicer and support for over-head conductors and has for its object to provide a comparatively simple and thoroughly efficient device of this character by means of which the broken or severed ends of a trolley wire may be effectually united so as to form a smooth continuous surface for engagement with the trolley wheel and thus prevent arcing or bumping when the trolley wheel travels over said support.

Further objects and advantages will appear in the following description, it being understood that various changes in form, proportions and minor details of construction may be resorted to within the scope of the appended claims.

In the accompanying drawings forming a part of this specification:—Figure 1 is a longitudinal sectional view of a combined splicer and support constructed in accordance with my invention, showing the manner of fastening the wires in position on the support. Fig. 2 is a top plan view. Fig. 3 is a transverse sectional view taken on the line 3—3 of Fig. 1, the wire sections being removed. Fig. 4 is a similar view taken on the line 4—4 of Fig. 1. Fig. 5 is a detail longitudinal sectional view of one end of the support showing the same used as a feeder.

Similar numerals of reference indicate corresponding parts in all of the figures of the drawings.

The improved device forming the subject matter of the present invention comprises an elongated body portion 5 having a lug or ear 6 projecting vertically from the central portion thereof and provided with a socket 7, the interior walls of which are threaded for connection with a suitable arm or hanger 8, by means of which the device may be suspended from a cross arm or other suitable support.

Formed in the lower longitudinal edge of the body portion 5 and extending the entire length thereof is a groove 9 arranged to receive the adjacent ends of the trolley wire or conductor, indicated at 10 and 11.

The upper longitudinal edge of the body portion is provided with relatively short longitudinally disposed grooves 12 which communicate with the groove 9 and serve to receive the terminals of the conductor sections 10 and 11, said terminals being bent downwardly in engagement with the walls of the grooves 12, as best shown in Fig. 1 of the drawings, thereby to prevent accidental displacement of said wires. The opposite walls of the short grooves 12 are preferably extended vertically above the upper longitudinal edge of the body portion to form spaced lips 13 which serve to assist in preventing accidental displacement of the wire and also serve to house and protect the latter.

Interposed between the wire sections 10 and 11 and seated in the groove 9, beneath the ear 6, is a filling piece 14 preferably formed of wire of the same cross sectional diameter as the wires 10 and 11, said intermediate wire or filling-piece 14 having its opposite ends curved to conform to the curvature of the bent portions of the wire sections 10 and 11 and to which it is welded, soldered or otherwise secured, as indicated at 15.

Attention is here called to the fact that the filling section 14 is disposed in horizontal alinement with the wire sections 10 and 11 so as to form a smooth continuous surface for contact with the trolley wheel, and thus prevent arcing or bumping as the trolley wheel passes over the support.

The casting constituting the body portion 5 is preferably reinforced and strengthened by the provision of inclined ribs 16, which extend from points adjacent the opposite ends of the body portion to the mouths of the grooves 12. The opposite ends of the body portion at the groove 9 are also preferably inclined or beveled at 17 to assist in positioning the wire sections 10 and 11 within said groove.

Attention is here called to the fact that the intermediate portions of the wire sections 10 and 11 bear against the vertical walls of the openings 18, while the intermediate or filling section 14 acts as a wedge and serves to retain the terminals of the wire sections 10 and 11 within the seating grooves without the employment of solder or similar material. If desired, however, the terminals of the wires 10 and 11 may be soldered, welded, or otherwise secured within

the grooves 12 without departing from the spirit of the invention.

When the device is used as a feeder, the feed wire 19 is extended longitudinally through one of the grooves 12 and thence downwardly through the vertical openings 18 formed in the body portion and soldered or otherwise fixed to the main conductor in order to insure a good electrical contact between the same, as best shown in Fig. 5 of the drawings.

The device may be made in different sizes and shapes and used either as a wire splicer or as a feeder.

Having thus described the invention what is claimed is:

1. A device of the class described comprising an elongated body portion having a continuous longitudinal wire receiving groove formed in the lower edge thereof, and spaced relatively short wire receiving grooves formed in its upper edge, and means for suspending the body portion from a support.

2. A device of the class described including an elongated body portion having its lower edge provided with a continuous longitudinal wire-receiving groove and its upper edge formed with relatively short wire-receiving grooves, line wire sections seated within the longitudinal groove at the lower edge of the body portion and having their terminals bent laterally and seated in the grooves at the upper edge of the body portion, and a filling piece interposed between the wire sections and disposed in horizontal alinement therewith.

3. A device of the class described comprising an elongated body portion having its lower edge provided with a continuous longitudinal wire-receiving groove and its upper edge formed with relatively short wire receiving grooves, there being vertical recesses formed in the body portion and forming a source of communication between said grooves, line wire sections seated in the lower longitudinal groove and having their terminals passing through the adjacent vertical recesses and thence bent downwardly within the upper longitudinal grooves, and a filling piece interposed between the line wire sections and having its opposite ends curved to conform to the curvature of said line wire sections.

4. A device of the class described including an elongated body portion having its lower edge provided with a continuous longitudinal wire receiving groove and its upper edge formed with relatively short wire-receiving grooves, there being vertical recesses in the body portion and forming a source of communication between said grooves, line wire sections seated in the grooves at the lower edge of the body portion and having their terminals extended upwardly through the vertical recesses and thence bent downwardly within the longitudinal grooves at the upper edge of the body portion, a filling-piece interposed between the wire sections and seated in the lower longitudinal groove, said filling-piece being disposed in horizontal alinement with the wire sections and having its opposite ends curved to conform to the curvature of said line wire sections where they pass through the vertical openings in the body portion.

5. A device of the class described comprising an elongated body portion having its lower edge provided with a continuous longitudinal wire-receiving groove and its upper edge formed with relatively short wire-receiving grooves, there being an ear extending vertically from the body portion between the short longitudinal grooves and having a socket formed therein, the interior walls of which are threaded, inclined strengthening ribs formed on the body portion and extending from the opposite ends of said body portion to the mouths of the relatively short grooves, line wire sections seated in the longitudinal groove at the lower edge of the body portion and having their terminals extended upwardly through the adjacent vertical openings and thence bent laterally and downwardly in engagement with the upper grooves, and a filling wire interposed between the wire sections, said filling-piece being disposed in horizontal alinement with the wire sections and having its opposite ends curved to conform to and electrically connected with the adjacent wire sections at their point of entrance through the vertical openings in the body portion.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

GEORGE S. PANNEBAKER.

Witnesses:
J. I. QUIGLEY,
GEO. T. HAWKE.